

USER MANUAL



HARD DRIVE QUATTRO

EXTERNAL HARD DRIVE / 3.5" / USB 2.0 / FIREWIRE 800 & 400 / eSATA

Dear user!

Thank you for selecting the **Freecom Hard Drive Quattro** as your external hard drive. The Freecom Hard Drive Quattro, with its 4 interfaces, offers you a very flexible storage solution. The drive connects to the most commonly used interfaces. For optimal use and performance we advise you to read this manual carefully before using this product.

Freecom Technologies • Germany www.freecom.com

Contents of the box

Please check the contents of the box; the following items should be included:

- Freecom Hard Drive Quattro (external hard drive)
- Power adapter
- Connection cables (USB 2.0, FireWire 800, FireWire 400, eSATA)
- 2 rubber footstands for positioning the drive upright
- Manual, safety manual and application software pre-installed on the hard drive
- Ouick Install Guide

Need assistance? Have questions?

In case you have a question about the use of this product, need information about other Freecom products or need technical assistance, please contact the Freecom Service Center for your country. See www.freecom.com.for details.

Freecom offers free unlimited helpdesk support.

Warning!

All rights reserved. The products named in this manual are only used for identification purposes and may be trademarks or registered trademarks of the respective companies. This device was designed for home or office use.

<u>Warning!</u> This device is equipment complying with EN55022 class A. This equipment can cause radio disturbances in a residential area. If this is the case, the user has to take appropriate measures and assume all responsibility and costs for. It may not be used near or with any life-sustaining systems.

Freecom cannot be made liable for any damages, loss of data or damage following thereof -whatsoever (including, without limitation, damages for loss of business profits, business interruption, loss of business information, or other pecuniary loss) arising out of the use of or inability to use this Freecom product, even if Freecom has been advised of the possibility of such damages.

We reserve the right to upgrade our products in keeping with technological advances.

User manual

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General Information

 $The following hardware and software requirements \, must be fulfilled to \, ensure \, trouble free \, operation.$

System requirements

In order to use the Freecom Hard Drive Quattro, following components are needed:

PC:

- Intel Pentium III / AMD Duron 900 MHz or higher
- 256 MB RAM (Vista: 512 MB RAM) or higher
- Available USB 2.0 or USB 1.1 port* or
- Available Firewire 800- or Firewire 400- port or
- Available eSATA- port
- Internet connection for online warranty registration, software updates and downloads
- Operating system: Windows XP, Windows Vista

Mac:

- PowerPC G3/G4/G5, Mac Book Pro or Intel Mac
- 256 MB RAM or higher
- Available USB 2.0 or USB 1.1 port* or
- Available Firewire 800- or Firewire 400- port or
- Available eSATA- port
- Internet connection for online warranty registration, software updates and downloads
- Operating system: Mac OS X v10.4 or higher

^{*} To achieve optimal performance from the Freecom Hard Drive Quattro your computer should be equipped with an USB 2.0 port.

Precautionary measures

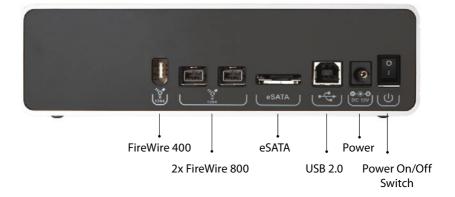
To ensure that your Freecom Hard Drive Quattro functions properly, please take note of the following precautions. If these are not followed, you may void your warranty and damage the Freecom Hard Drive Quattro.

- Safely remove the Freecom Hard Drive Quattro via your operating system (the "unplug or eject hardware" option in the Windows taskbar) before disconnecting the cable or power cable and before switching off the device. Failing to do so may result in data loss.
- Do not drop the Freecom Hard Drive Quattro or expose it to other kinds of sudden mechanical shocks as this may result in data loss and damage to the Freecom Hard Drive Quattro.
- Do not use the Freecom Hard Drive Quattro when the ambient temperature is below 10°C or above 35°C.
- If the Freecom Hard Drive Quattro is moved from a cool environment to a warmer environment, please allow the drive to acclimatize to the ambient temperature before operating the device. Failing to do so may lead to condensation within the drive enclosure, which in turn may cause the drive to malfunction.
- Do not place liquids or drinks on the Freecom Hard Drive Quattro. When liquids are spilled and get in contact with the electronics within the drive enclosure, it will damage the drive and will cause the drive to malfunction.
- Do not use the Freecom Hard Drive Quattro in a dusty environment. Dust inside the
 enclosure may damage the internal electronics and result in drive malfunction.
- Opening the Freecom Hard Drive Quattro will void the warranty.
- Since USB 2.0 is backwards compatible with USB 1.1, the Freecom Hard Drive Quattro can be connected to all USB ports. When connected to a USB 1.1 port, however, the performance (data transfer rate) of the Freecom Hard Drive Quattro will be much lower than when the drive is connected to a USB 2.0 port.
- Only use the power adapter that was supplied with the Freecom Hard Drive Quattro.

Freecom Hard Drive Quattro

For your convenience, the Freecom Hard Drive Quattro has been partitioned (1 partition) and pre-formatted (FAT32 file system). The FAT32 format ensures maximum interchangeability of the Freecom Hard Drive Quattro between different computers. Should you choose to format the Freecom Hard Drive Quattro in another file system (e.g. NTFS), please be aware of possible problems when connecting the Freecom Hard Drive Quattro to another computer than the one you used for formatting.

Rear view



Chapter 1: Hardware Installation

WARNING! Only connect the Hard Drive Quattro via the USB, Firewire or eSATA port. Never use ports at the same time!

Remove the plastic protective cover sheets from the front and rear of the drive.

Before connecting the cables make sure the Freecom Hard Drive Quattro is switched off.



 Connect the interface cable (USB, Firewire or eSATA) to the Freecom Hard Drive Quattro.



2. Connect the cable of the power supply to the Freecom Hard Drive Quattro and the power supply itself to the socket.



Connect the interface cable (USB, Firewire or eSATA) to the interface port (USB, Firewire or eSATA) of your computer.



4. Switch on the Freecom Hard Drive Quattro.

Since USB 2.0 is backwards compatible with USB 1.1, the Freecom Hard Drive Quattro can be connected to all USB ports. When connected to a USB 1.1 port, however, the performance (data transfer rate) of the Freecom Hard Drive Quattro will be much lower than when the drive is connected to a USB 2.0 port.

For optimum performance the Freecom Hard Drive Quattroshould always be connected to a USB 2.0 interface.

1.1 Power Switch

The hard drive inside the Freecom Hard Drive Quattro is always powered, even if the cable is disconnected from your computer. Therefore, please turn off the Freecom Hard Drive Quattro if it is not used. This saves power and increases the lifetime of the hard drive. The power switch is on the rear of the Freecom Hard Drive Quattro.





Attention! Before switching off the Freecom Hard Drive Quattro manually, make sure to safely remove the Freecom Hard Drive Quattro via your operating system (the "unplug or eject hardware" option in the Windows taskbar). Failing to do so may result in loss of data.

1.2 LED

LED off: Device power is off LED on: HD switched on LED flashes: Data transfer



Chapter 2: Driver Installation

Under Windows XP / Vista and Mac OS X a separate Freecom driver is not required. The drivers will be installed automatically by the operating system after plugging in the Freecom Hard Drive Quattro into the port of the computer.

Chapter 3: Installation of the application software

3.1 Installation software PC

1. Click on "StartPC.exe" in the main directory of the hard drive. The Freecom start menu opens.



2. Click on "Software Installation" -> "NTI Shadow", "NTI Ripper" or other software. The installation starts now. Follow the instructions on the screen, confirm with "Next" in order to continue with the installation.

3.1.1 Saving Freecom data

The user manuals and complementary software (when applicable) are pre-loaded onto the hard drive. We recommend that you save these files to your computer ("My Documents"/"Freecom"), to always have a backup of these files in case you (accidentally) reformat the drive or delete these files from the drive.

Saving these files from the external hard drive to your computer is easy:

- 1. Click on the button "Save Freecom files".
- 2. All provided data on the Freecom hard drive will be saved to the folder "Freecom" in "My Documents".



3.2 Installation software Mac

 Click on "Start MAC" in the main directory of the hard drive. The Freecom start menu opens.



2. Click on "Install NTI Shadow". The installation starts now. Follow the instructions on the screen, confirm with "Next" in order to continue with the installation.

3.2.1 Saving Freecom data

The user manuals and complementary software (when applicable) are pre-loaded onto the hard drive. We recommend that you save these files to your computer ("Documents"/ "Freecom"), to always have a backup of these files in case you (accidentally) reformat the drive or delete these files from the drive.

Saving these files from the external hard drive to your computer is easy:

- 1. Click on the button "Save Freecom files".
- All provided data on the Freecom hard drive will be saved to the folder "Freecom" in "Documents".



Chapter 4: Partitioning your Freecom Hard Drive Quattro

4.1 General information

Your Freecom Hard Drive Quattro was partitioned and formatted to provide you with the maximum available capacity and compatibility. FAT32 was chosen as file system to assure that you will be able to read your files on any PC. It is recommended not to change the current configuration of your Freecom Hard Drive Quattro.

For some users another file system might fit better for their needs. This manual describes current limitations of most common file systems and Instructions to enable you to adapt the Freecom Hard Drive Quattro to your needs.

4.2 File System features

Please refer to the tables below for an overview:

File systems supported by different operating systems

File system Operating system	FAT	FAT32	NTFS	HFS+
Windows XP / Vista	yes	yes	yes	no
Mac OS X	yes	yes	yes (only read)	yes

Maximum size of a partition

File system Operating system	FAT	FAT32	NTFS	HFS+
Windows XP / Vista	4 GB*	32 GB	16 TB	-
Mac OS X 10.1.x	-	128 GB	-	2 TB
Mac OS X 10.2.x	-	128 GB	-	8 TB
Mac OS X 10.3.x	-	(-> 128 GB)	-	16 TB
Mac OS X 10.4.x	-	(-> 128 GB)	-	16 TB
Mac OS X 10.5.x	-	(-> 128 GB)	-	16 TB

^{*} FAT partitions larger than 2 GB can only be administrated by Windows XP / Vista.

Example for different partitions with different file systems on one Freecom Hard Drive Quattro

File system Total size of Freecom Hard Drive Quattro	NTFS	FAT32
500 GB	470 GB	30 GB

Note: On NTFS formatted hard drives can only be written under Windows XP / Vista. Under MacOSX data can only be read.

The example above is a good solution for Windows XP / Vista users who sometimes exchange data with Macs.

For storing the data under Windows XP / Vista both partitions can be used. As the NTFS file system can only be read by Mac data to be used on these operating systems must be stored on the FAT32 partition.

Please follow the steps below to adapt the Hard Drive Quattro for your needs.

4.3 Partitioning your Hard Drive Quattro under Windows XP / Vista

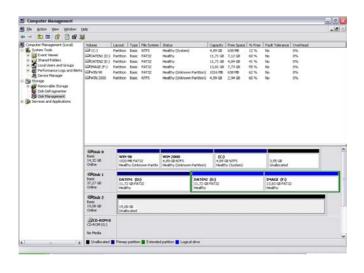
4.3.1 Deleting a partition on the Freecom Hard Drive Quattro

- 1. Click with the right mouse button on the "My Computer" icon on your desktop.
- 2. Select the option "Manage".
- 3. Select the option "Storage" -> "Disk Management".
- 4. Choose your external Hard Drive Quattro and right-click on the partition.
- Select "Delete Partition" and confirm by clicking on "Yes". The partition will be deleted now.

4.3.2 Creating a partition on the Freecom Hard Drive Quattro

The following steps will guide you through the process of creating partitions on your Freecom Hard Drive Quattro. After this procedure your Hard Drive Quattro will be ready for use and it will be allocated a drive letter.

- 1. Click with the right mouse button on the "My Computer" icon on your desktop.
- 2. Select the option "Manage".
- 3. Select the option "Storage" -> "Disk Management".
- 4. Choose the hard drive, which is "unallocated". Ensure that the entire drive is "unallocated".



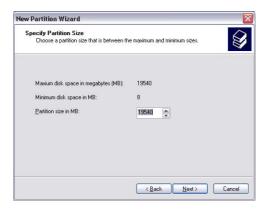
5. Click with the right mouse button on the "unallocated" area and select the option "New Partition". The "New Partition Wizard" opens. Click on "Next".



Select "Primary partition" and click on "Next".



7. Now you can adjust the size of your partition. Click on "Next" if only one partition is to be created. See next chapter (Creating two or more partitions on the Freecom Hard Drive Quattro under Windows XP / Vista) how to create more than one partition.



8. Assign a drive letter to your hard drive. Normally you can use the default options. Click on "Next".

 Select the formatting option "Format this partition with the following settings". Choose either "FAT32" or "NTFS", the "Allocation unit size" should remain on "Default". Finally select "Perform a quick format" and click on "Next".



10. Clickon "Finish" to complete the partitioning of your Freecom Hard Drive Quattro. Your Freecom Hard Drive Quattro will be formatted now and is ready-to-use afterwards.



4.3.3 Creating two or more partitions on the Freecom Hard Drive Quattro under Windows XP / Vista

- 1. Repeat the steps from the previous chapter (Creating a partition on the Freecom Hard Drive Quattro under Windows XP / Vista) for creating the first partition.
- 2. Click with the right mouse button on the "My Computer" icon on your desktop.
- 3. Select the option "Manage".
- 4. Select the option "Storage" -> "Disk Management".
- 5. Right-click on the unallocated space of your Freecom Hard Drive Quattro and select the option "New partition". The "New Partition Wizard" opens. Click on "Next".
- 6. Select "Extended partition" and click on "Next".

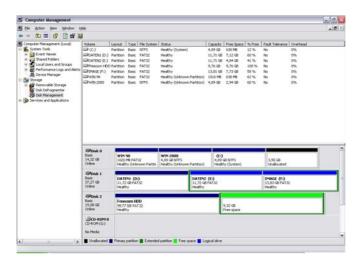


7. Now you can adjust the size of your partition. Enter the size and click on "Next".

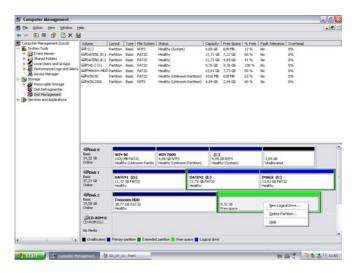


8. Click on "Finish" to create the "Extended partition". The unallocated space now changed to "Free space".





Right-click on "Free Space" and select "New Logical Drive". The "New Partition Wizard" opens. Click on "Next".

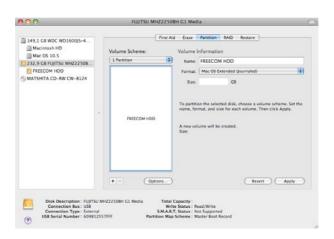


- 10. "Logical drive" is already selected. Click on "Next".
- 11. Specify the partition size and click on "Next".
- 12. Assign a drive letter and click on "Next".
- 13. Select the formatting option "Format this partition with the following settings". Choose either "FAT32" or "NTFS", the "Allocation unit size" should remain on "Default". Finally select "Perform a quick format" and click on "Next".
- 14. Click on "Finish" to complete partitioning. Your partition will be formatted now and is ready-to-use.

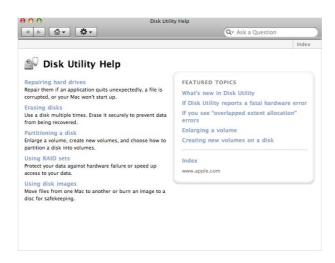
Note: If you select NTFS as file system, the data of your Hard Drive Quattro can be read only under Mac OS X. There is no possibility to write data.

4.4 Partitioning your Freecom Hard Drive Quattro under Mac OS X

- 1. Open the "Disk Utility". This can be found in "Applications" —> "Utilities".
- 2. Click on the tab "Partition".



Here you can setup the partition settings and partition the drive according to your settings (e.g. Mac OS Extended). Detailed information how to use the Disk Utility can be found in the help:



WARRANTY

(valid in Europe/Turkey only)

We thank you for purchasing this Freecom product and hope you will enjoy using it. In order to avoid unnecessary inconvenience on your part, we suggest reading the quick install guide, instruction manual and any additional electronic and or printed manuals. When problems occur we have a database with Frequently Asked Questions (FAQ) on our Freecom website (www.freecom.com), please check this site before you contact the helpdesk.

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